

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-030066**Date Inspected:** 21-Sep-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1200**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Scott Kortum**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS Tower**Summary of Items Observed:**

Caltrans Quality Assurance Inspector (QA) Joe Adame arrived at the American Bridge/Fluor (ABF) JV job site between the times noted above in order to monitor ABF Quality Control activities and the in process work being performed by ABF production personnel. The following items were observed:

ESW Repair Excavation

RWR-201308-002

ESW N-043, Location "P"-Face B:

The QA Inspector observed ABF welder Donald Plumb (WID-0891) performing excavation to verify indications observed during Ultrasonic Testing with pulse/echo & pitch/catch. Mr. Plumb was performing the excavation using an air carbon arc gouging and a grinder. This repair is being performed from Face B due to a planar indication that was observed & removed on Face A at this Y location. Mr. Plumb was instructed by ABF QC Inspector Scott Kortum to notify him when indications are visible to allow QC/QA time to inspect the excavation. The repair location was noted as:

Weld excavated at: D=25mm- No indications observed.

Weld excavated at: D=36mm- No indications observed.

Excavation Length: (Y-1180mm~1480mm) L=300mm

W-63mm

D-36mm

After grinding to bright metal the QC Inspector performed Magnetic Particle Testing (MT) of the final excavation. The QC Inspector stated the excavation appears to be free of discontinuities and he would complete ABF daily inspection report and magnetic particle testing report to detail the findings. The QA Inspector also performed an

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

MT verification of the final excavation. See TL-6028 for additional details on items inspected on this date. Mr. Plumb was later observed setting up the Miller ProHeat 35 induction blankets at the repair location in preparation for SMAW of the repair excavation.

ESW Repair Excavation Welding

RWR-201308-009

ESW W-042, Location "M"-Face B:

The QA Inspector observed ABF welder Mike Jimenez (WID-4671) performing Shield Metal Arc Welding (SMAW) on the repair excavation of Electroslag Weld (ESW) "M" Face B @ Original Y-4400mm. ABF QC Inspector Scott Kortum performed welding parameters verifications at random intervals throughout the shift.

Location of the repair is as follows:

Repair excavation (Y=-4210mm~4450mm) L=340mm, W-47mm, D-54mm.

Prior to welding, Mr. Jimenez was observed preheating the weld to over 300° Fahrenheit using the Miller ProHeat 35 with heat induction blankets and a propylene torch. The welder was using 4.0mm diameter electrode (E7018-1 HR4) per ABF Welding Procedure Specification (WPS) ABF-WPS-D15-1000-Repair Rev.3. The welding process in use was the Shielded Metal Arc Welding process (SMAW). The QA Inspector observed the welding amps were at 178 and preheat was verified with a temperature indicator to be 300°F. The welding observed appeared to be in compliance with the WPS noted above.

On this date ABF welding crew at the Tower were "rained out" due to inclement weather.



Summary of Conversations:

Only general conversations with ABF/JV QC NDT personnel relevant to work and testing performed during this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Inspected By:	Adame,Joe	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer
